

Πανεπιστήμιο Αθηνών

Διατμηματικό ΠΜΣ «Οικονομική & Διοίκηση Τηλεπικοινωνιακών Δικτύων»

Δρ. Δημήτρης Γκούσκος, Επίκ. Καθηγητής

email [gouscos@di.uoa.gr](mailto:gouscos@di.uoa.gr) - web <http://www.di.uoa.gr/~gouscos>

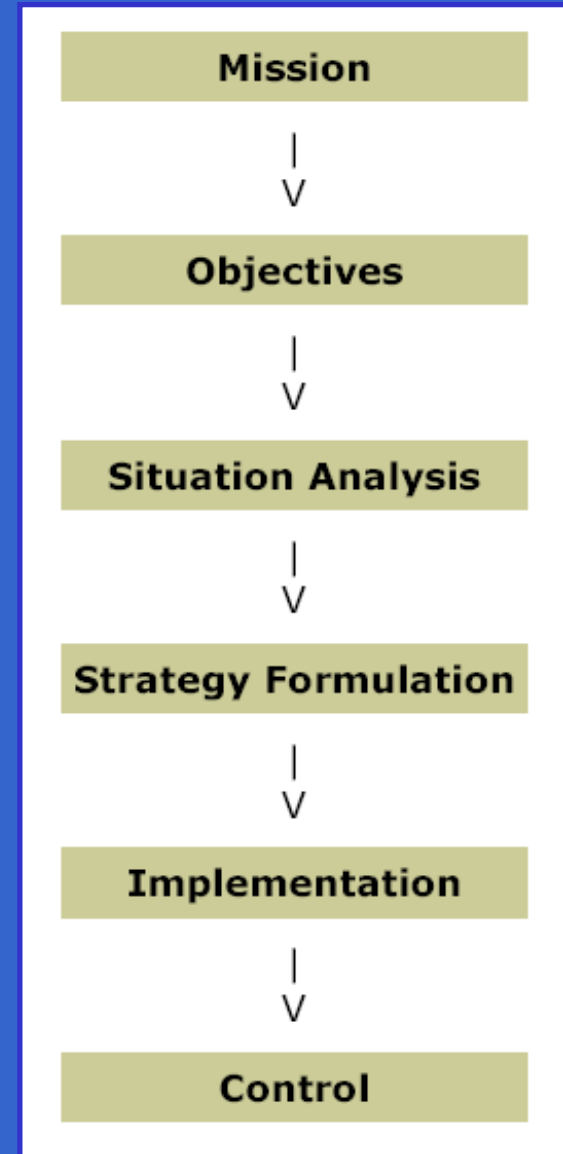
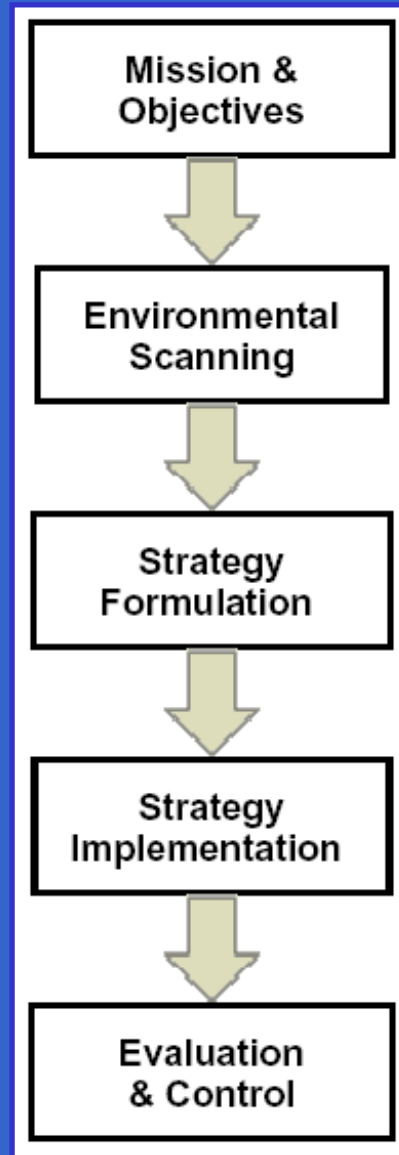
Τεχνολογική και Επιχειρησιακή Διοίκηση  
Τηλεπικοινωνιακών και Πληροφοριακών Συστημάτων

διοίκηση υπηρεσιών και διαδικασιών :  
μοντέλα CMM

ακαδ. έτος 2005-2006, Γ' εξάμηνο

ιστοσελίδα μαθήματος : <http://eclass.uoa.gr/DI262>

# διαδικασία επιχειρησιακής διοίκησης : β' ανάγνωση



# διαδικασία επιχειρησιακής διοίκησης: β' ανάγνωση (συνέχ.)

- αυτο-συνείδηση                      επιχειρησιακή σχεδίαση  
(αποστολή, όραμα, στόχοι)
- αυτο-ανάλυση                        στρατηγική ανάλυση  
(ανάλυση PEST, SWOT, ...)
- δράση                                    διακυβέρνηση πληροφορικής  
(IT Governance)
- ανάδραση                            επιχειρησιακή επίδοση  
(operational performance)

# υπηρεσίες και προϊόντα

- ❑ οι υπηρεσίες είναι εξ ορισμού άυλες, τα προϊόντα είναι κατά κύριο λόγο ένυλα
- ❑ τα (ένυλα ή άυλα) προϊόντα μπορούν να αποθηκευτούν, οι υπηρεσίες όχι
- ❑ η παράδοση προϊόντων συνήθως οδηγεί και σε μεταφορά ιδιοκτησίας, η παροχή υπηρεσιών όχι
- ❑ το στάδιο παραγωγής ενός προϊόντος μπορεί να διαχωριστεί από το στάδιο κατανάλωσης ή χρήσης, η χρήση μιας υπηρεσίας γίνεται εξ ορισμού ταυτόχρονα με την παροχή της

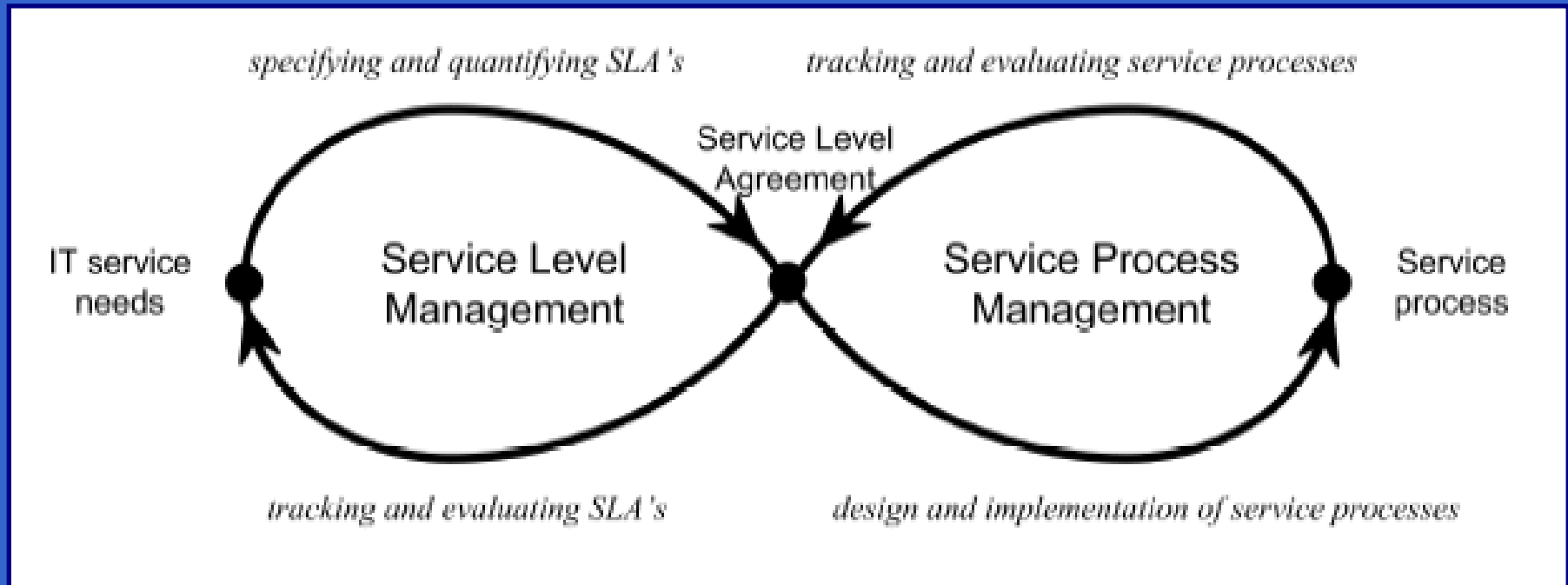
# υπηρεσίες και προϊόντα (συνέχ.)

- η ποιότητα μιας υπηρεσίας πρέπει υποχρεωτικά να διασφαλίζεται στο χρόνο παροχής (και ταυτόχρονης χρήσης), δεν μπορεί να βελτιωθεί εκ των υστέρων
- η έννοια της ποιότητας έχει, για τις υπηρεσίες, έτι περαιτέρω βαρύτητα για τους χρήστες και κρισιμότητα για τους παροχείς

# συμφωνίες επιπέδου εξυπηρέτησης

- Service Level Agreements, SLAs
- διμερείς (μεταξύ παροχέα και πελάτη) συμβάσεις παροχής υπηρεσιών που προσδιορίζουν, μεταξύ άλλων
  - α) το περιεχόμενο της εξυπηρέτησης
  - β) μη λειτουργικά χαρακτηριστικά (επιδόσεις, διαθεσιμότητα, ασφάλεια κ.λπ.)
  - γ) οικονομικές χρεώσεις (χρεώσεις χρήσης και bonus/malus)
  - δ) διαδικασίες παρακολούθησης της εφαρμογής της σύμβασης και επίλυσης διαφορών

# διοίκηση επιπέδου υπηρεσιών (SLM) = διοίκηση διαδικασιών παροχής υπηρεσιών (SPM)



# αξιοπιστία εξυπηρέτησης

- συνιστώσες αξιοπιστίας : ωριμότητα και ικανότητα
- ωριμότητα : εμπειρία και σταθερότητα
- ικανότητα : σημερινή καλή επίδοση, δυνατότητα βελτίωσης



# Capability Maturity Models (CMMs)

- αξιολόγηση της *ωριμότητας* με σκοπό να διαπιστωθούν οι υφιστάμενες *ικανότητες*
- χρήση για λόγους *μάθησης και βελτίωσης*, όχι για λόγους *κολασμού ή αποκλεισμού*
- αρχική εφαρμογή σε πεδία εσωτερικών διαδικασιών με ποικιλία μεθοδολογιών και θεωρίας σχετικά με τον ενδεδειγμένο τρόπο δουλειάς (π.χ. ανάπτυξη λογισμικού)
- έμφαση στο *ποιες* είναι οι ενδεδειγμένες λειτουργικές διαδικασίες, και δευτερευόντως στο *πώς* θα υλοποιηθούν

# Capability Maturity Models (CMMs) (συνέχ.)

αρχικό πεδίο εφαρμογής : εσωτερικές διαδικασίες παραγωγής

- ❑ Capability Maturity Model for Software (SW-CMM)
- ❑ Capability Maturity Model Integration (CMMI)

επόμενο πεδίο εφαρμογής : εσωτερικές διαδικασίες λειτουργίας

- ❑ People Capability Maturity Model (CMM-P)

επόμενο πεδίο εφαρμογής : διαδικασίες παροχής υπηρεσιών

- ❑ eSourcing Capability Model (eSCM)
- ❑ IT Service Capability Maturity Model (ITS-CMM)

# Capability Maturity Model for Software (SW-CMM)

- ❑ Software Engineering Institute (SEI) ,  
Carnegie Mellon University (CMU), ΗΠΑ
- ❑ κεντρική ιστοσελίδα <http://www.sei.cmu.edu/cmm>
- ❑ SW-CMM Version 1.1, 1993
- ❑ μετάπτωση στο CMMI (2000)

## Capability Maturity Model<sup>®</sup> for Software (SW-CMM<sup>®</sup>)

The Capability Maturity Model for Software (also known as the CMM and SW-CMM) has been a model used by many organizations to identify best practices useful in helping them increase the maturity of their processes.

In 2000, the SW-CMM was upgraded to [CMMI<sup>®</sup>](#) (Capability Maturity Model Integration). The SEI no longer maintains the SW-CMM model, its associated appraisal methods, or training materials, nor does the SEI offer SW-CMM training. For more information about the sunset policy established by the SEI to help SW-CMM users upgrade to CMMI, see [How Will Sunsetting of the Software CMM Be Conducted?](#)

If your organization has not yet upgraded to CMMI, refer to the book [The Capability Maturity Model: Guidelines for Improving the Software Process](#) for more information. Released in 1995, this book is the authoritative reference for SW-CMM Version 1.1. It is published by the Addison Wesley publishing company and is available as part of the SEI Series on Software Engineering.

### Software CMM Model Documents

The SW-CMM consists of two SEI technical reports. You can download these reports from the SEI Web site from the links provided below:

- [Capability Maturity Model for Software, Version 1.1](#), Paulk, Mark C.; Curtis, Bill; Chrissis, Mary Beth; Chrissis, and Weber, Charles, Software Engineering Institute, CMU/SEI-93-TR-24, DTIC Number ADA263403, February 1993.
- [Key Practices of the Capability Maturity Model, Version 1.1](#), Paulk, Mark C.; Weber, Charles V.; Garcia, Suzanne M. Garcia, Chrissis, Mary Beth; and Bush, Marilyn W., Software Engineering Institute, CMU/SEI-93-TR-25, DTIC Number ADA263432, February 1993.
- A hard bound copy of the book [The Capability Maturity Model: Guidelines for Improving the Software Process](#), is published by the Addison Wesley publishing company as part of the SEI Series on Software Engineering.

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## Capability Maturity Model for Software (Version 1.1)

**M. Paulk**  
**B. Curtis**  
**M. Chrissis**  
**C. Weber**

additional SEI publications

M. Paulk B. Curtis M. Chrissis C. Weber 

*Technical Report*  
CMU/SEI-93-TR-024

[PDF File](#) (0.46MB)

**Important:** The Software CMM is being phased out and will no longer be supported by the SEI. For more information, see [Sunset of the Software CMM](#).

**Abstract:** In November 1986, the Software Engineering Institute (SEI) with assistance from the Mitre Corporation began developing a process maturity framework that would assist organizations in improving their software process. This effort was initiated in response to a request to provide the federal government with a method for assessing the capability of their software contractors. In September 1987, the SEI released a brief description of the process maturity framework and a maturity questionnaire (CMU/SEI-87-TR-23). The SEI intended the maturity questionnaire to provide a simple tool for identifying areas where an organization's software process needed improvement. Unfortunately, the questionnaire was too often regarded as "the model" rather than as a vehicle for exploring process maturity issues.

After four years of experience with the software process maturity framework and the preliminary version of the maturity questionnaire, the SEI has evolved the software process maturity framework into a fully defined model.

This model will be used in a systematic, principled way to derive a maturity questionnaire. By fully elaborating the maturity framework, a model has emerged that provides organizations with more effective guidance for establishing process

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## Key Practices of the Capability Maturity Model Version 1.1

**Mark Paulk**  
**Charlie Weber**  
**Suzanne Garcia**  
**Mary Beth Chrissis**  
**Marilyn Bush**

additional SEI publications

Mark Paulk Charlie Weber Suzanne Garcia Mary Beth Chrissis Marilyn Bush 

*Technical Report*  
CMU/SEI-93-TR-025

[PDF File](#) [0.89MB]

**Important:** The Software CMM is being phased out and will no longer be supported by the SEI. For more information, see [Sunset of the Software CMM](#).

**Abstract:** This document provides the key practices that correspond to each maturity level of the Capability Maturity Model and information on how to interpret the key practices. It is an elaboration of what is meant by maturity at each level of the CMM and a guide that can be used for software process improvement, software process assessments, and software capability evaluations.

The Software Engineering Institute (SEI) is a federally funded research and development center sponsored by the U.S. Department of Defense and operated by Carnegie Mellon University.

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URL: <http://www.sei.cmu.edu/publications/documents/93.reports/93.tr.025.html>

Last Modified: 22 February 2005

# Capability Maturity Model Integration (CMMI)

- ❑ Software Engineering Institute (SEI),  
Carnegie Mellon University (CMU), ΗΠΑ
- ❑ κεντρική ιστοσελίδα <http://www.sei.cmu.edu/cmmi>
- ❑ CMMI-SE/SW/IPPD/SS Version 1.1, 2002
- ❑ CMMI-AM Version 1.1, 2005

## MANAGEMENT

## What is CMMI<sup>®</sup>?

[CMMI Information Sources](#) | [Worldwide Adoption](#)  
[Benefits of Process Improvement](#) | [Benefits of CMMI](#)

Capability Maturity Model<sup>®</sup> Integration (CMMI) is a process improvement approach that provides organizations with the essential elements of effective processes. It can be used to guide process improvement across a project, a division, or an entire organization. CMMI helps integrate traditionally separate organizational functions, set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes.



This page points you to places where you can find more information about CMMI, and describes the worldwide adoption and benefits of CMMI.

### CMMI Information Sources

Before you begin applying CMMI to your organization, collect information about it. The CMMI Overview presentation provides a good summary of CMMI, and the [Adoption](#) page is a good starting point for finding information most relevant to your situation.



The [CMMI Overview presentation](#) introduces CMMI and can help you make decisions about your process improvement plans. You also can use this presentation to inform others in your organization about CMMI.

The Adoption page contains information about CMMI-related conferences and events, online forums, presentations, mappings, and written publications. Consider bookmarking the [Getting Started](#) and [Adoption](#) pages to help you develop your process improvement program.



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## CMMI<sup>SM</sup> for Systems Engineering/Software Engineering/Integrated Product and Process Development/Supplier Sourcing, Version 1.1, Continuous Representation (CMMI-SE/SW/PPD/SS, V1.1, Continuous)

### CMMI Product Team

additional SEI publications

CMMI Product Team

find

*Technical Report*  
CMU/SEI-2002-TR-011

[PDF File](#)[Word Files](#)

**Abstract:** Capability Maturity Model Integration (CMMI<sup>SM</sup>) models have evolved the Capability Maturity Model<sup>®</sup> (CMM<sup>®</sup>) concept, established by the Capability Maturity Model for Software (SW-CMM), to a new level that enables the continued growth and expansion of the CMM concept to multiple disciplines. Like the SW-CMM, EIA/IS 731, IPD-CMM, SA-CMM, and other process improvement models, CMMI models are tools that help organizations improve their processes. This CMMI model is designed to help organizations improve their product and service development, acquisition, and maintenance processes. Concepts covered by this model include systems engineering, software engineering, integrated product and process development, and supplier sourcing as well as traditional CMM concepts such as process management and project management. Each CMMI model is designed to be used in concert with other CMMI models, making it easier for organizations to pursue enterprise-wide process improvement at their own pace. This CMMI model has a continuous representation, which focuses on measuring process improvement using capability levels. Capability levels apply to process-improvement achievement within individual process areas such as configuration management or verification.

**Note:** As of August 2002, CMM<sup>®</sup> is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

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## CMMI<sup>SM</sup> for Systems Engineering/Software Engineering/Integrated Product and Process Development/Supplier Sourcing, Version 1.1, Staged Representation (CMMI-SE/SW/IPPD/SS, V1.1, Staged)

**CMMI Product Team**

additional SEI publications

CMMI Product Team

*Technical Report*  
CMU/SEI-2002-TR-012

[PDF File](#)  
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**Abstract:** Capability Maturity Model Integration (CMMI<sup>SM</sup>) models have evolved the Capability Maturity Model<sup>®</sup> (CMM<sup>®</sup>) concept, established by the Capability Maturity Model for Software (SW-CMM), to a new level that enables the continued growth and expansion of the CMM concept to multiple disciplines. Like the SW-CMM, EIA/IS 731, IPD-CMM, SA-CMM, and other process improvement models, CMMI models are tools that help organizations improve their processes. This CMMI model is designed to help organizations improve their product and service development, acquisition, and maintenance processes. Concepts covered by this model include systems engineering, software engineering, integrated product and process development, and supplier sourcing as well as traditional CMM concepts such as process management and project management. Each CMMI model is designed to be used in concert with other CMMI models, making it easier for organizations to pursue enterprise-wide process improvement at their own pace. This CMMI model has a staged representation, which focuses on measuring process improvement using maturity levels. Maturity levels apply to process-improvement achievement across the organizational unit using the model.

**Note:** As of August 2002, CMMI<sup>®</sup> is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

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## CMMI Acquisition Module (CMMI-AM), Version 1.1

**Tom Bernard**  
**Brian Gallagher**  
**Roger Bate**  
**Hal Wilson**

additional SEI publications

Tom Bernard Brian Gallagher Roger Bate Hal Wilson 

*Technical Report*  
CMU/SEI-2005-TR-011

[PDF File](#) (0.59MB)  
[HTML Version](#)

**Abstract:** Building on relevant best practices extracted from the Capability Maturity Model Integration (CMMI) framework, this report defines effective and efficient practices for acquisition projects. These best practices focus on the activities performed by acquisition professionals in the acquisition program office. They also address internal program office activities that support the monitoring and control of development contractors and suppliers. They provide a foundation for acquisition process discipline and rigor that enables product and service development to be repeatedly executed with high levels of ultimate acquisition success.

This report documents acquisition practices that should be performed by government acquisition projects acquiring systems or services. These practices, however, can also be used by non-government organizations to improve their acquisition practices. This report does not contain prescribed implementation approaches for achieving acquisition best practices. Instead, the proven content of the CMMI framework is used as a base, and amplifications that are specific to the acquisition process have been added.

The information in this report can also be used by acquisition organizations that manage several related acquisition projects (e.g., product centers, acquisition commands, Program Executive Officers, Service/Component acquisition executives) to establish an acquisition process improvement program, ensuring the success of projects in their purview.

# People Capability Maturity Model (CMM-P)

- ❑ Software Engineering Institute (SEI) ,  
Carnegie Mellon University (CMU), ΗΠΑ
- ❑ κεντρική ιστοσελίδα <http://www.sei.cmu.edu/cmm-p>
- ❑ P-CMM Version 2.0, 2001

- [People-CMM main page](#)
- [People-CMM Model](#)
- [People-CMM Lead Assessors](#)
- [People-CMM Lead Appraiser Authorization Process](#)
- [People-CMM FAQ](#)
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## People Capability Maturity Model<sup>®</sup> (P-CMM<sup>®</sup>) Version 2

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### Obtaining the People CMM Version 2

Version 2 of the People CMM was released as an SEI Maturity Model, available from the publications area of the SEI Web site at [http://www.sei.cmu.edu/publications/documents/D1\\_reports/D1mm001.html](http://www.sei.cmu.edu/publications/documents/D1_reports/D1mm001.html)

It has also been released as a book in the [SEI Series in Software Engineering](#) published by [Addison-Wesley](#).

### People Capability Maturity Model

The People Capability Maturity Model (People CMM) is a [framework](#) that helps organizations successfully address their critical people issues. Based on the best current practices in fields such as human resources, knowledge management, and organizational development, the People CMM guides organizations in improving their processes for managing and developing their workforces. The People CMM helps organizations characterize the maturity of their workforce practices, establish a program of continuous workforce development, set priorities for improvement actions, integrate workforce development with process improvement, and establish a culture of excellence. Since its release in 1995, thousands of copies of the People CMM have been distributed, and it is used worldwide by organizations, small and large.

The People CMM consists of five maturity levels that establish successive foundations for continuously improving individual competencies, developing effective teams, motivating improved performance, and shaping the workforce the organization needs to accomplish its future business plans. Each maturity level is a well-defined evolutionary plateau that institutionalizes new capabilities for developing the organization's workforce. By following the maturity framework, an organization can avoid introducing workforce practices that its employees are unprepared to implement effectively.

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## People Capability Maturity Model® (P-CMM®) Version 2.0

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**Bill Curtis**  
**Bill Hefley**  
**Sally Miller**

additional SEI publications

Bill Curtis Bill Hefley Sally Miller 

*Maturity Model*  
CMU/SEI-2001-MM-001

[PDF File](#)

**Abstract:** The People Capability Maturity Model® is a tool that helps you successfully address the critical people issues in your organization. The People CMM® employs the process maturity framework of the highly successful Capability Maturity Model for Software (SW-CMM) as a foundation for a model of best practices for managing and developing an organization's workforce. The Software CMM has been used by software organizations around the world for guiding dramatic improvements in their ability to improve productivity and quality, reduce costs and time to market, and increase customer satisfaction. Based on the best current practices in fields such as human resources, knowledge management, and organizational development, the People CMM guides organizations in improving their processes for managing and developing their workforce. The People CMM helps organizations characterize the maturity of their workforce practices, establish a program of continuous workforce development, set priorities for improvement actions, integrate workforce development with process improvement, and establish a culture of excellence. Since its release in 1995, thousands of copies of the People CMM have been distributed, and it is used worldwide by organizations, small and large, such as IBM, Boeing, BAESystems, Tata Consultancy Services, Ericsson, Lockheed Martin and QAI (India) Ltd.

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Last Modified: 22 February 2005

# eSourcing Capability Model (eSCM)

- ❑ IT Services Qualification Center (ITsqc),  
Carnegie Mellon University (CMU), ΗΠΑ
- ❑ κεντρική ιστοσελίδα <http://itsqc.cs.cmu.edu>
- ❑ eSourcing Capability Model for Service Providers (eSCM-SP)  
Version 2.0, 2004
- ❑ eSourcing Capability Model for Clients (eSCM-CL)  
(υπό ανάπτυξη)
- ❑ eSecurity Capability Model (υπό διερεύνηση)
- ❑ eCommerce Capability Model (eCCM) (υπό ανάπτυξη)





## The IT Services Qualification Center

ITSqc creates capability models and qualification methods to improve sourcing relationships in the Internet-enabled economy.

Organizations are increasingly delegating IT-intensive business activities to external service providers to take advantage of new growth in the global telecommunications infrastructure. The business processes being outsourced range from routine and non-critical tasks, to strategic processes that directly impact revenues. Managing and meeting client expectations is a major challenge in these business relationships, and examples of failure abound.

ITSqc developed the [eSourcing Capability Model for Service Providers \(eSCM-SP\) v2](#) for three purposes. It helps IT-enabled sourcing service providers appraise and improve their ability to provide high quality sourcing services, and it gives them a way to differentiate themselves from the competition. Prospective clients can evaluate service providers based on their eSCM-SP level of certification and Practice Satisfaction Profile.

ITSqc has begun a related effort to model best practices of IT-enabled sourcing clients - the [eSourcing Capability Model for Clients \(eSCM-CL\)](#).

The Center is exploring the need for Capability and appraisal methods for [eSecurity](#) in cooperation with the Center for Survivable Systems at Carnegie Mellon.

In addition, ITSqc is developing an initial framework for the eCommerce Capability Model (eCCM) to address the specific issues regarding the ability to conduct business electronically.

### AUTHORIZED ORGANIZATIONS

#### Update on Authorized Organizations

ITSqc recently increased the set of Authorized individuals and organizations available to perform eSCM-SP Capability Determinations. To view the current list of these individuals and organizations [click here](#).

### TOP NEWS STORY

September 29, 2005

#### Nipuna, World's First eSCM Level 4 Certified BPO

Nipuna Services Limited, one of India's leading Business Process Outsourcing (BPO) service providers, has become the world's first BPO services company to achieve eSCM-SP Capability Level 4 Certification (eSourcing Capability Model for Service Providers). eSCM-SP has been developed by the globally reputed IT Services Qualification Center (ITSqc) at Carnegie Mellon University. View the [full story](#)





## The eSourcing Capability Model for Service Providers (eSCM-SP) v2

The eSCM-SP addresses the critical issues related to IT-enabled sourcing (eSourcing). Sourcing providers use the eSCM-SP and its accompanying methods to systematically determine their existing capabilities. The Model is used for capability improvement and for certification at a Capability Level. Clients use the eSCM-SP as a means to compare service providers during their selection process.

Although most quality models focus only on delivery capabilities, in eSourcing there are also critical issues associated with initiation and completion of the contract. The eSCM-SP has been designed to complement existing quality models so that service providers can capitalize on their previous improvement efforts. Documenting [Model Comparisons](#) is an ongoing effort.

The eSCM-SP v2 [Publications](#) are available for free download.

We welcome your comments on the eSCM-SP v2. They can be submitted on the [Change Request](#) page.

The eSCM-SP was developed by a multi-cultural and multi-disciplinary team from Carnegie Mellon University, Satyam Computer Services Ltd., Accenture, IBM Global Services, and EDS.

### MODEL DOWNLOAD

#### The eSourcing Capability Model for Service Providers v2

The eSCM-SP v2 is available as a two-part PDF download. Part 1 contains an overview of the model. Part 2 contains information on model interpretation and detailed descriptions for all 84 Practices.

- » [eSCM-SP v2, Part 1](#) (5Mb)
- » [eSCM-SP v2, Part 2](#) (6Mb)

### CHANGE REQUESTS

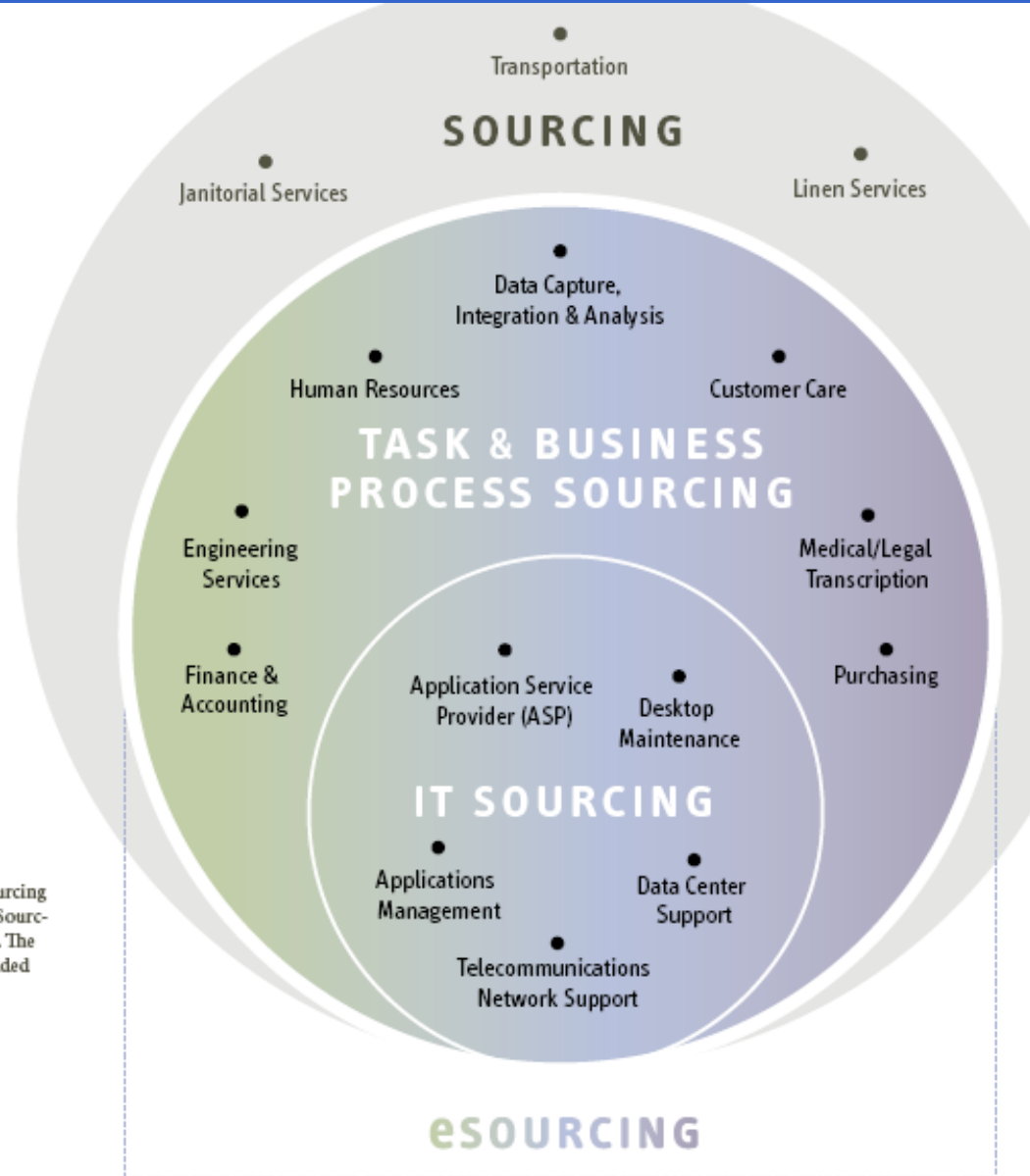
#### Changes to the eSCM-SP v2

We rely on input from industry and government users as we make improvements to the eSCM-SP. You may provide feedback or suggest changes to the eSCM-SP v2 or its related courses and documentation using the Change Request form.

All change requests are reviewed by the eSCM-SP Development Team and the eSCM-SP Change Control Board (CCB) before the decision is made whether or not to adopt the request.

» [submit a change request](#)

# μοντέλο eSCM : εμβέλεια εφαρμογής



*Figure 1.*  
Types of sourcing services  
The middle two circles, IT Sourcing and Task & Business Process Sourcing, are covered by eSourcing. The outer circle, Sourcing, is excluded from eSourcing.

## A Companion Model

Over the past several years, all kinds of organizations, from manufacturing firms to banks to hospitals, have been delegating computer-intensive activities to external service providers because they are focusing on "core competencies" or lack their own in-house capabilities. In many cases, they have not been satisfied with the results.

The actions of the client organization and those of the service provider in these sourcing relationships are both critical for success. ITSqc is developing a best practices model that allows client organizations to continuously evolve, improve, and innovate their capabilities to develop stronger, longer term, and more trusting relationships with their service providers.

The eSourcing Capability Model for Client Organizations (eSCM-CL) enables client organizations to appraise and improve their capability to foster the development of more effective relationships, better manage these relationships, and experience fewer failures in their client-service provider relationship.

Over the coming months, ITSqc researchers will be working closely with and visiting selected client organizations in a series of focused interviews to better understand both successes and failures in sourcing IT-enabled services. This work will inform the development of the eSCM for Clients.

### REVIEWERS WANTED

#### The eSCM for Clients

The ITSqc is currently seeking reviewers to help accelerate the development of the eSCM for Clients. Qualified reviewers will have experience managing outsourcing contracts in a variety of market sectors.

[» become a reviewer](#)

### DID YOU KNOW?

Challenges that client organizations face include:

- Establishing an appropriate sourcing strategy
- Managing risks throughout the sourcing activities
- Identifying, selecting and negotiating with service providers
- Conducting service provider governance and performance management
- Managing relationships

### DID YOU KNOW?

Preliminary investigation shows



## eSecurity Initiative

In keeping with the ITsqc mission to identify and address the need for best practices models and accompanying diagnostic methods related to sourcing performance, the Center established a working group to focus on security considerations.

An initial workshop, held in July, 2003 with security experts from the Center's Consortium members began exploring and answering the following questions:

- Are the practices in the eSourcing Capability Model for Service Providers adequate?
- What are the "Best practices" models, .e.g., CERT® System and Network Security Practices and/or materials available for IT-enabled service providers and their clients to adopt?
- Can we use OCTAVE<sup>SM</sup> and/or OCTAVE-S<sup>SM</sup> as diagnostic methods for determining security risk and mitigation plans in conjunction with eSourcing Capability Model (eSCM) evaluations?
- What are the adult learning opportunities/training preferences for introducing professionals to these reference models and security audit methods?
- eSCM-SP v2 Practices addressing security, confidentiality, privacy, disaster recovery, and risk management were reviewed and modified to reflect feedback from the workshop participants and other security experts.

Identification of the entire set of standards, models and frameworks of relevance to both service provider and client organizations was done and the working group will be determining whether there is sufficient need to warrant development of a new framework or guidance documents to support use of the numerous existing resources. Standards under consideration include: ISO 17799, CobiT®, CERT Practices®, ITIL, CISSP, NIST 800 series, Common Criteria, Security Forum (EU), OECD Principles, COSO Risk Framework, Business Roundtable, SANS Top 20, BITS, and Software Alliance. The working group also



# IT Service Capability Maturity Model (ITS-CMM)

- ❑ CIBIT Consultants | Educators, Ολλανδία
- ❑ κεντρική ιστοσελίδα <http://www.itservicecmm.org>
- ❑ ITS-CMM Version 1.0 Release Candidate 1, 2005



# The IT Service Capability Maturity Model®

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## Introduction to the IT Service CMM

### Latest news

- January 28, 2005: [IT Service CMM Version 1.0 Release candidate 1 is available](#).
- November 9, 2004: The [IT Service CMM Pocket Guide](#) is available.

The IT Service Capability Maturity Model (IT Service CMM®) is a maturity growth model aimed at providers of IT services, such as management of hardware and software, operations, and software maintenance. The structure of the model is equal to that of the [Software CMM](#), the contents of the IT Service CMM, however, are key process areas needed for mature IT service provision.

The IT Service CMM is [work in progress](#). We are currently finishing version 1.0 of the model. You are invited to [join](#) in the [review process](#).

Currently, the IT Service CMM is in use in several medium-sized and large organizations. See the [list of assessments](#) for some of the organizations that are applying the IT Service CMM to improve their IT service processes and organization(s).

The model, currently at version 1.0RC1, is described in a technical report which you can [download for free](#).

Enjoy, [Frank Niessink and Viktor Clerc](#)  
[CIBIT | SERC ICT Consultants](#).

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Accuracy and interpretation of this document are the responsibility of CIBIT Consultants | Educators. Carnegie Mellon University has not participated in this publication.



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## Download the IT Service CMM

Available documents for download. Most recent versions are listed first.

IT Service CMM				
Document title	Type	Version	Date	Description
<a href="#">The IT Service CMM</a>	Technical report	<b>1.0 Release Candidate 1 (latest version)</b>	January 28, 2005	Technical report describing the IT Service CMM. Contains overview of the model and complete specification of all key process areas.
<a href="#">The IT Service CMM</a>	Technical report	0.4	June 24, 2004	Technical report describing the IT Service CMM. Contains overview of the model and complete specification of key process areas upto and including level three.
<a href="#">The Vrije Universiteit IT Service CMM (in Chinese)</a>	Technical report	L2-1.0-Chinese	March 2002	Technical report describing the IT Service CMM. Contains overview of the model and complete specification of key process areas upto level two. Translation into Chinese by Tianzu Zuo. NB: This translation has not been reviewed by the authors of the IT Service CMM

Other documents				
Document title	Type	Version	Date	Description
<a href="#">IT Service CMM Questionnaire</a>		0.3	October 22, 2003	Maturity questionnaire for the level two key process areas
<a href="#">IT Service CMM Whitepaper</a>	Whitepaper	1.0.2	January 15, 2003	Summary of the IT Service CMM
<a href="#">IT Service CMM Whitepaper</a>	Whitepaper	1.0.2	November 30, 2001	Summary of the IT Service CMM <i>in Dutch</i>

# γενική λογική και συνιστώσες μοντέλων CMM

- γενικά επίπεδα ωριμότητας διαδικασιών – συνήθως από επίπεδο 0 (καμία ωριμότητα, διαδικασίες επί τούτου) έως επίπεδο 4 ή επίπεδο 5 (πλήρης ωριμότητα, βελτιστοποιούμενες διαδικασίες)
- βασικές περιοχές διαδικασιών (key process areas) για κάθε επίπεδο
- καλές πρακτικές για κάθε επίπεδο και λειτουργική περιοχή
- κριτήρια και σχήμα πιστοποίησης για την ανάβαση και παραμονή σε ένα επίπεδο



# μοντέλο SW-CMM : επίπεδα ωριμότητας

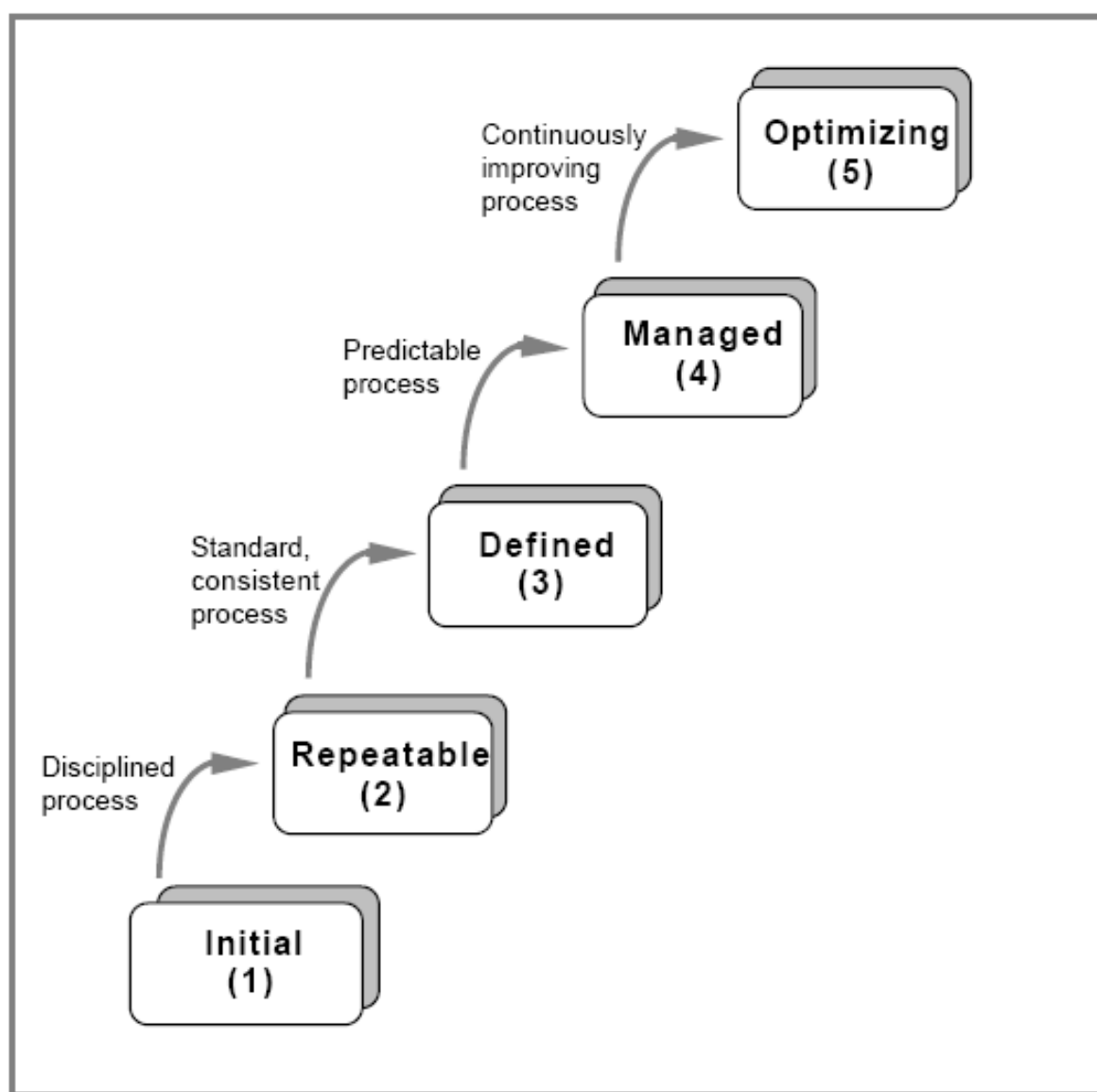


Figure 2.1 The Five Levels of Software Process Maturity

# μοντέλο SW-CMM : βασικές περιοχές διαδικασιών

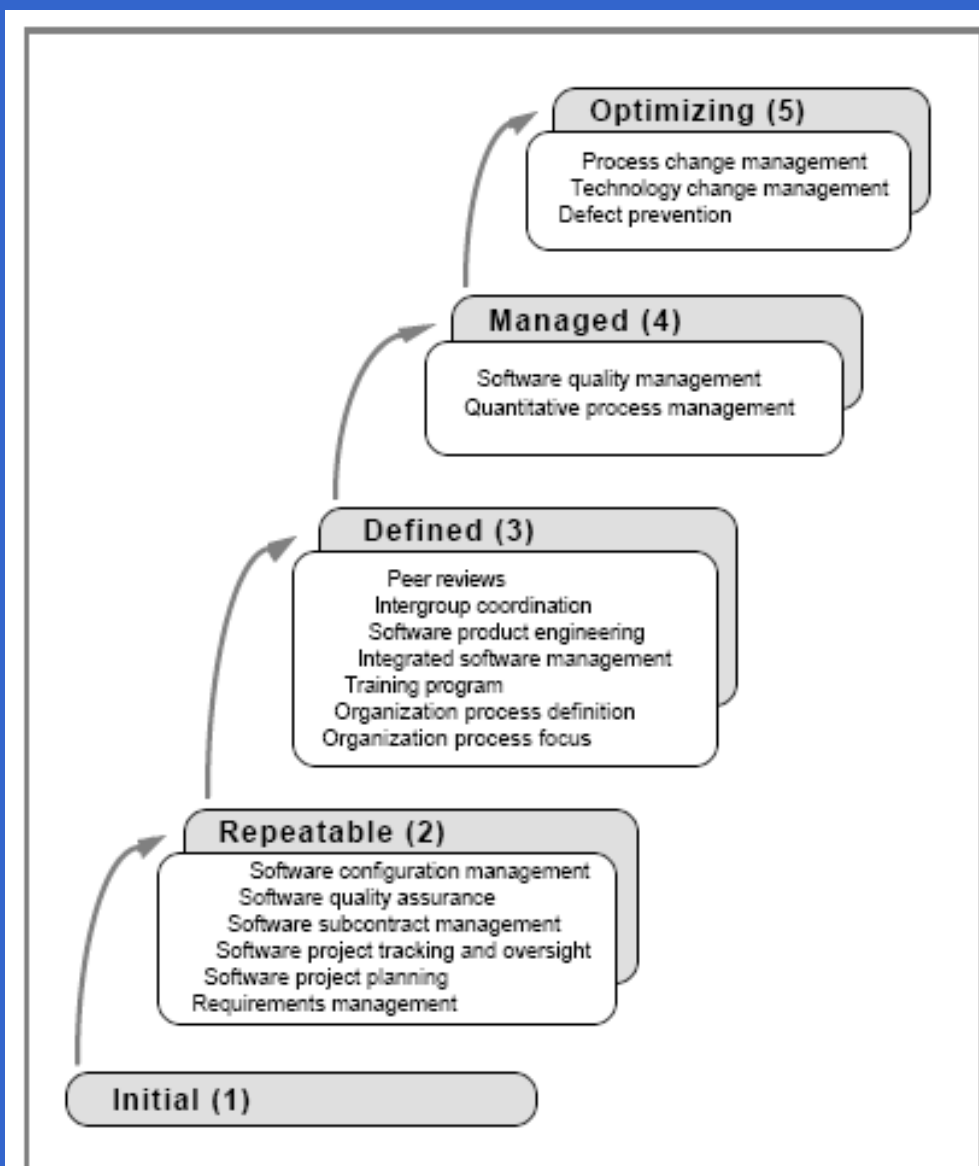


Figure 3.2 The Key Process Areas by Maturity Level

# μοντέλο CMM-P : επίπεδα ωριμότητας

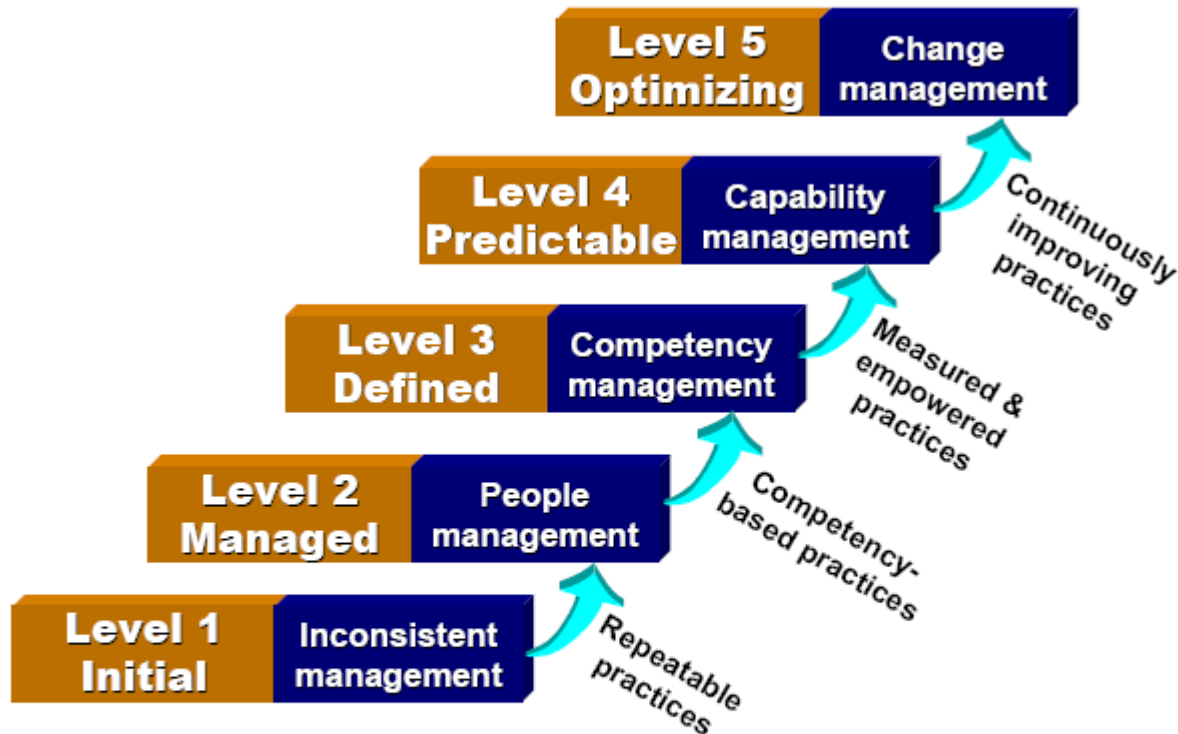
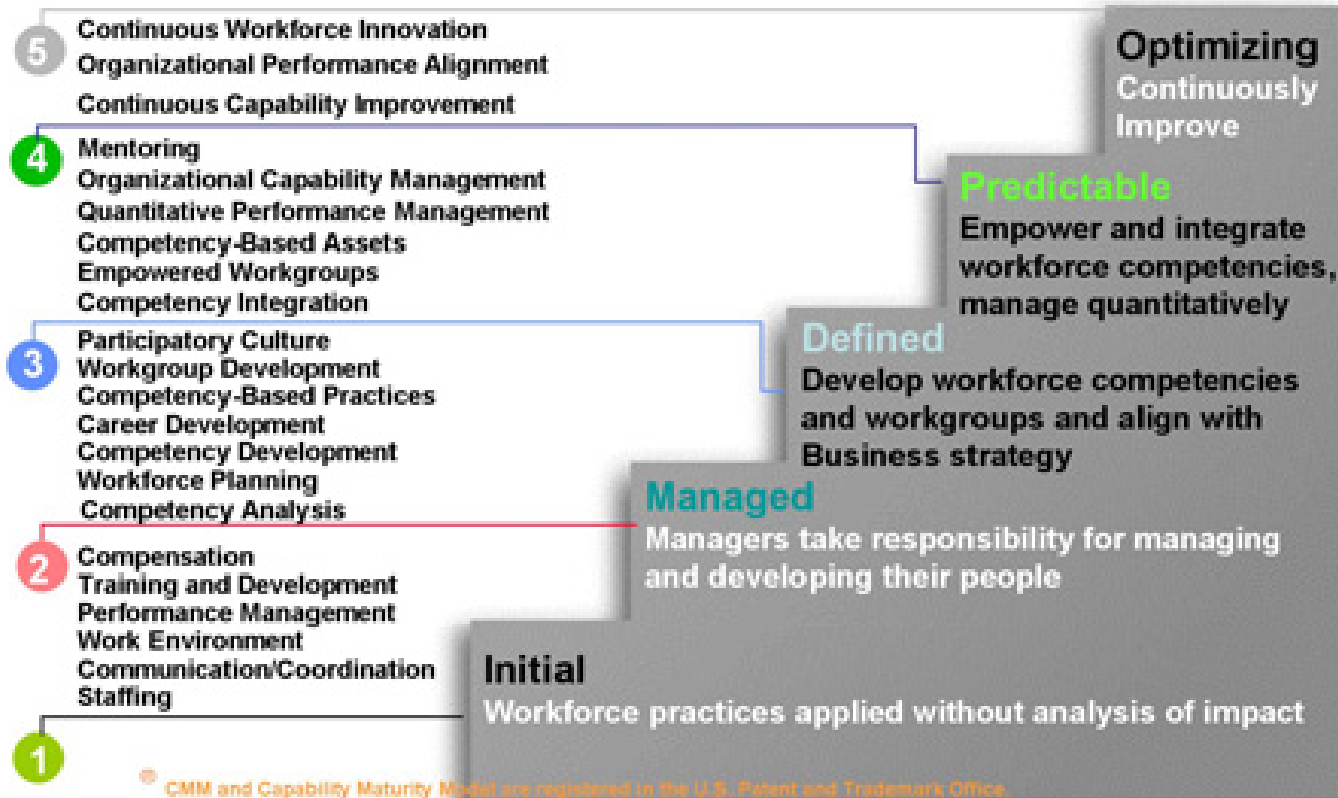


Figure 2.1 — The five maturity levels of the People CMM

# μοντέλο CMM-P : βασικές περιοχές διαδικασιών

## People CMM<sup>®</sup> Architecture



# μοντέλο ITS-CMM : επίπεδα ωριμότητας

## **Maturity Levels**

### **Initial**

No key process areas present

### **Repeatable**

Repeatable services, basic processes in place

### **Defined**

standardized services and service process

### **Managed**

quantitative control of service processes

### **Optimizing**

Qualitative control of service processes, continuous process improvement

# μοντέλο ITS-CMM : βασικές περιοχές διαδικασιών

	Management	Enabling	Delivery
<b>Optimizing</b>		Technology Change Management	
	Process Change Management		Problem Prevention
<b>Managed</b>	Quantitative Process Management		Service Quality Management
	Financial Service Management		
<b>Defined</b>	Integrated Service Management	Organization Process Focus	Service Delivery
		Organization Service Definition	
		Organization Process Definition	
		Training Program	
		Intergroup Coordination	
		Resource Management	
		Problem Management	
<b>Repeatable</b>	Service Commitment Management	Configuration Management	
	Service Delivery Planning	Service Request and Incident Management	
	Service Tracking and Oversight	Service Quality Assurance	
	Subcontract Management		
<b>Initial</b>	Ad hoc processes		

# αξιοποίηση των μοντέλων CMM

- ❑ τυποποίηση διαδικασιών εσωτερικής λειτουργίας
- ❑ τυποποίηση διαδικασιών παροχής υπηρεσιών
- ❑ τυποποίηση διαδικασιών διακυβέρνησης Πληροφορικής
  
- ❑ εργαλείο ελέγχου, πιστοποίηση ποιότητας
- ❑ lingua franca για ανάγκες συγκρισιμότητας
- ❑ εργαλείο επιλογής ή αξιολόγησης συνεργατών

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